Form PTO-1449 (Rev. 8-88) U.S. Department of Commerce Patent and Trademark Office

OCT 1 6 2061

Attorney Docket No.: 0329.65766

Serial No.: 09/941,279

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

Applicant: Schliesman et al.

Filing Date: August 27, 2001 Group: 1714

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriat
7 \$ 1	3,298,030	01/10/1967	Lewis et al.	1		
		12/10/1968	Rice	1		-
	,	08/11/1970	Blumenthal	1		
3		10/20/1970	Huang		1	
	3,615,549		Ohyama et al.	1		
		04/11/1972	Curran et al.			
		02/06/1973	Kurz et al.			
	3,759,744		Schliesman			
		06/10/1975	Hoffmann et al.	1		
	 	06/29/1976	Carder			*
$\neg \vdash$		07/25/1978	Schröder et al.			
		05/01/1979	Raphael et al.	1	1	
		09/18/1979	Kato et al.			
		09/18/1979	Kato et al.			
		05/05/1981	Date et al.			
		05/18/1982	Boston	1		
	4,371,582	02/01/1983	Sugiyama et al.			
	4,425,405	01/10/1984	Murakami et al.			
	4,440,827	004/03/1984	Miyamoto et al.			
11	4,446,174	05/01/1984	Mackawa et al.		V	
77	4,460,637	07/17/1984	Miyamoto et al.		A	
	4,474,847	10/02/1984	Schröder et al.		N -	
	4,474,850	10/02/1984	Burwasser			
	4,474,859	10/02/1984	Oshima et al.			
	4,478,910	10/23/1984	Oshima et al.			
	4,490,434	12/25/1984	Oshima et al.			3
	4,542,059	09/17/1985	Toganoh et al.			
	4,554,181	11/19/1985	Cousin et al.			
	4,564,560	01/14/1986	Tani et al.			
	4,576,867	03/18/1986	Miyarnoto	1 7		-
	4,620,197	10/28/1986	Miyamoto et al.			
	4,636,409	01/13/1987	Arai et al.			
	4,642,654	02/10/1987	Toganoh et al.			
	4,732,786	03/22/1989	Patterson et al.			
	4,743,507	05/10/1988	Franses et al.			
	4,758,461	07/19/1988	Akiya et al.	II		
$\bot \bot$	4,780,356	10/25/1988	Otouma et al.	Π	I	
		12/20/1988	Schubring et al.	Ц		
_ليلح	4,877,678	10/31/1989	Hasegawa et al.			
	4,877,686	10/31/1989	Riou et al.	1		

7			, 		۰					17		\neg
	<u> </u>	4,879,166	11/7/1989	Misuda et al.	_		\perp			¥		4
i		4,892,787	01/09/1990	Kruse et al.	1		\perp			1		
		4,900,620	02/13/1990	Tokita et al.	1					1		┙
		4,902,568 4,915,923	02/20/1990	Morohoshi	\prod					1		╝
	1	915,923	04/10/1990	Ogawa et al.	Π					II		
	7		06/05/1990	Iwata et al.	П					П		\neg
			05/07/1991	Ogawa et al.	П				\neg	T		٦
	12		08/20/1991	Akiya et al.	П		\top		\neg	T		٦
	—₹	5.057.570	10/15/1991	Miller et al.	П		1			T		٦
		5,057,570 5,081,470	10/15/1991	Kurabayashi et al.		T	\top		\Box	Ť		
			06/23/1992	Kurabayashi et al.		Γ	\top		\mathcal{T}	T		
			01/19/1993	Kojima et al.		T			\mathcal{I}	T		
		5,213,873	05/25/1993	Yasuda et al.		T			\mathcal{I}	T		
		5,266,397	11/30/1993	Ogawa et al.		\mathbf{I}			T_{-}			
		5,270,103	12/14/1993	Oliver et al.		T	Т		T_{-}	T		
			01/18/1994	Ohmori et al.		\top	Т		T	T		
			04/12/1994	Idei et al.		7	1		<i></i>	7		٦
			05/24/1994	Malhotra et al.		_1				1		
\Box			06/14/1994	Kondo et al.						T		
			03/14/1995	Kuroyama et al.				\neg		T		
			08/01/1995	Macaulay et al.	1		\sqcap	\top		1		
			10/17/1995	Sakaki et al.			1	7		1		
			10/31/1995	Suzuki et al.			T	\top	```	7		
			12/05/1995	Ogawa et al.			7	\top		7		
			12/26/1995	Kawano et al.	Γ		1	\top		T		
			02/25/1997	Romano et al.			1	T		1		
			08/26/1997	Nikoloff			1	T		1		
			08/26/1997	Stokes et al.				Γ		1		
			12/23/97	Sargeant et al.						7		
			12/30/1997	Malhotra	T		\neg	Π		1		
		5,709,976	01/20/1998	Malhotra			\Box			T		
		5,725,946	03/10/1998	Fukushima et al.								
		5,747,146	05/5/1998	Kashiwazaki et al.				1				
			5/26/1998	Kuroyama et al.			4	1		1		_
 			08/25/1998	Momma et al.	_		4	\perp		4		
	 	5,846.647	12/08/1998	Yoshino et al.	L		Ц	1		1		
<u> </u>	1_	5,851,654	12/22/1998	Yoshino et al.	_		4	_		4		
<u> </u>	1-1		01/05/1999	Okumura et al.	<u> </u>		Н	Ĵ		4		
	1		01/05/1999	Chen et al.	↓_		'			4		_
 	+		01/26/1999	Ohmura et al.	╄	-4	-		 	4		
├—	+		02/02/1999	Sargeant et al.	┼	-+	+		├	4		_
}	+	5,869,177		Yoshino et al.	╀	+	-		╄-	4		_
-	+		03/16/1999	Adair et al.	-	+	-		4-	4		_
	+		03/16/1999	Hiorns	╀	+-	\dashv		+	+		_
-	1-		03/16/1999	Kuroyama et al.	+	+-	+		+-	+		_
-	1-1		03/16/1999	Igarashi et al. Yang et al.	┼-	+	\dashv		+	+	 	
-	1-		04/27/1999	Malhotra et al.	+	 	+		+	+		-
	1-1		06/29/1999	Fryberg et al.	H		\dashv		+	+		_
 	1		07/27/1999	Malhotra	+1		\dashv		\dashv	+		
	T		07/27/1999	Owatari et al.	††		十		$\neg t$	+		_
	1		07/27/1999	Yamane et al.	11		\dashv		\dashv	1	· · · · · · · · · · · · · · · · · · ·	_
			08/24/1999	Chen et al.	1		\dashv			1		_
	J		10/05/1999	Kuroyama	#		\dashv			Ħ	-	_
				——————————————————————————————————————	ш.					-11		

, t '			7.00			3 of				
XT	5,965,244	09/12/1999	Tang et al.	T	/					
~		10/16/1999	DeMatte et al							
+-+		01/04/2000	Chen et al.	 \						
+		02/22/2000	Nitta OCT 1 6 3001		X					
+-+		03/14/2000	Nitta Will 1 6 2001							
		06/13/2000	Camp et al.							
+-+		12/26/2000	Kasahara et al.		7					
DREIGN	PATENT DOCUMENTS	12/20/2000	Saito et al. Camp et al. Kasahara et al.	-/-	* '	\				
						Translation				
-	Document Number	Date	Country	Class	Subclass					
入一		12/14/1976	Japan	7,033	0000000					
7+				-1\	<i> </i>	 - - 				
┪—┤		03/15/1977	Japan		 					
+		04/15/1980	Japan		 					
1 -	56-148,583		Japan		 	 -				
+ +	56-148,586	11/18/1981	Japan		 	 				
┥—┼	56-082,085		Japan			 				
+-+	57-107878	07/05/1982	Japan	++-	 /-	 				
+	57-107,879		Japan		 	 				
+ +	3,151,471		Germany	- - \	 	 				
1-1	57-157,786		Japan		 	 				
1	58-094,491		Japan		 	 				
1	2,129,333 B		GB		\ 	 				
	JP 1160674 (Abstract only)	06/23/1989	Japan		\mathbb{N}					
	439,153 A	07/31/1991	EPO	,	Ιλ	-				
	493,100 A1	07/01/1992	EPO		Λ	<u> </u>				
	; WO 95/00340	01/05/1995	PCT		4.					
	JP 8072387 (Abstract only)	03/19/1996	Japan							
	00730976/EP 81 Exemplary Claims	09/11/1996	EPO	7						
		11/20/1996	EPO							
	JP 09272257 (Abstract only)		Japan							
1 1	803,374 A2	10/29/1997	EPO		1					
	2,334,684 A		GB	1	1					
7 1	968,836 A2		EPO		1					
	1,002,657 A1		EPO	1/	1	V				
V	. 888,904 B1		EPO							
	OTH	ER DOCUMEN	NTS (Including Author, Title, Date, Pertinent P	ages, Etc.)						
8	Ralph K. Iler. Silica Gels Biochemistry." Ed. John V		"The Chemistry of Silica Solubility, Polymeriz (462-621) 1979.	ation, Colloid	and Surface	Properties, and				
			Pitch Pacification White Paper Grades; Kenit	e [®] ; Celite [®] ; Ha	arborlite [®] ." E	d. World Mine				
		75, and 78 Cati	onic Emulsions, The Next Generation of Alkalin	ne Sizing Agen	ts." Ed. Herci	ıles, Inc; Decen				
-8-	Masao Takahashi, Teiji Sato and Masahide Ogawa; Research and Development Division "Development of Amorphous Silica for Ink Recording Paper." Ed. Mizusawa Industrial Chemicals, Ltd.; April 23, 1990.									
	Paper Chemicals Products & Services. "Lectrapel Anti-Static Agent." Ed. Calgon Corporation, Water Management Division; December 1992.									
	"Basoplast" 335 D"; BASF Corporation; June 1994.									
			ng Treatment." Ed. Hercules, Inc.; November							

	, T
('\2	Martifin OL/107; May 1995.
	"Polyox" Water-Soluble Resins". (1995)
	Micahel C. Wilthiam. "Silica Pigments for this Jet Printablility; Presented at the 1996 TAPPI Coating Conference, Nashville, TN, May 21, 1996.
·	"Kirk-Othmer Encyclopedia of Chemical Technology." Recycling, Oil to Silicon. Ed.John Wiley & Sons; Fourth Edition; Volume 21. (9/1992)
	CIBA-GEIGY Technical Bulletin. "Fluorescent Whitening Agents for Paper." (195)
2	CIBA-GEIGY Technical Bulletin. "Tinopal HST Liquid." (1995)
2 4	CIBA-GEIGY Technical Bulletin. "Tinopal SCP Liquid." (1995)
	Paper Chemicals. MSA-150 Surface Size. Ed. Morton Water Based Polymers. (1995)
	Davison Silica Gels. "Typical Chemical and Physical Properties of Silica Gel." (1995)
	"UniQ-Print® 8000 Unique Printability Enhancer" Sequa Chemicals, Inc. Ed. Sequa Chemicals, Inc. 1095
	D.M. Chapman, Ph.D. "Silica-Gel Coatings for Ink-Jet Media." Ed. Grace Davison. (1995)
	"The Davison Family of Syloid" Silicas. "Ed. Grace Davison Chemical. (1995)
	"Introduction to Silica Gel." (1955) V
V	"Acronal" PR 8689 X". Ed. BASF Corporation. August 1995. (1995)
Examiner	0 01 -1 -1 -1 -1 -7